

B<sup>2</sup>  
(concluded)

9. (Twice amended) An apparatus for providing at least one patterned layer on a substrate, which apparatus is provided with a stamp of claim 1.

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REMARKS

Claims 1 through 9 are pending in the present application.  
Claims 1 through 9 have been amended.

The Action (1) objected to the drawings under 37 CFR 1.83(a) and/or claim 9 contending that the drawings fail to show "an apparatus for providing at least one patterned layer on a substrate", (2) objected to the specification contending that it is inappropriate to reference the claims as the claims may change during prosecution, (3) rejected claims 1 to 4 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 3,277,819 to Berkland. (hereafter "the Berkland patent"), (4) rejected claims 5 and 6 under 35 U.S.C. 103(a) as being unpatentable over the Berkland patent in view of U.S. Patent No. 3,678,848 to Roser et al. (hereafter "the Roser patent"), and (5) rejected claims 7 to 9 under 35 U.S.C. 103(a) as being unpatentable over the Berkland patent in view of U.S. Patent No. 6,180,239 to Whitesides et al. (hereafter "the Whitesides patent").

Regarding items (1) identified above, it is respectfully submitted that at least Fig. 3 of the drawings, as originally filed, shows at least a portion of the "apparatus" of claim 9 between reservoir 3 and reservoir 31. The reservoirs 3/31 "are included in a circuit which further comprises a storage container, a pump, and connection lines" of the "apparatus" (see spec., page 7, lines 6-15; and page 5, lines 30-34).

smaller than said distance between said first side and said second side of said permeable stamp body.

4. (Amended) The stamp of claim 1, wherein said permeable carrier body has a porous material.

5. (Twice amended) The stamp of claim 1, wherein said reservoir has a porous material.

6. (Twice amended) The stamp of claim 1, wherein said stamp is cylindrical in shape, with said structured printing face forming an outer cylinder shell.

7. (Twice amended) A method of manufacturing an electronic component, comprising the steps of:

patterning a surface of a substrate by means of a stamp, said stamp having a structured printed face for use in a lithographic process; and

bringing said stamp into contact with said substrate such that a liquid cooperative with said structured printing face is transferred to a surface of said substrate,

wherein said stamp of claim 1 is used therein.

8. (Amended) The method of claim 7, wherein said stamp is cylindrical in shape, and said stamp is rotated when being applied to the substrate such that the entire printing face of the stamp is rolled over the substrate.

9. (Twice amended) An apparatus for providing at least one patterned layer on a substrate, which apparatus is provided with a stamp of claim 1.

#### REMARKS

Claims 1 through 9 are pending in the present application. Claims 1 through 9 have been amended.

The Action (1) objected to the drawings under 37 CFR 1.83(a) and/or claim 9 contending that the drawings fail to show "an apparatus for providing at least one patterned layer on a substrate", (2) objected to the specification contending that it is inappropriate to reference the claims as the claims may change during prosecution, (3) rejected claims 1 to 4 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 3,277,819 to Berkland. (hereafter "the Berkland patent"), (4) rejected claims 5 and 6 under 35 U.S.C. 103(a) as being unpatentable over the Berkland patent in view of U.S. Patent No. 3,678,848 to Roser et al. (hereafter "the Roser patent"), and (5) rejected claims 7 to 9 under 35 U.S.C. 103(a) as being unpatentable over the Berkland patent in view of U.S. Patent No. 6,180,239 to Whitesides et al. (hereafter "the Whitesides patent").

Regarding items (1) identified above, it is respectfully submitted that at least Fig. 3 of the drawings, as originally filed, shows at least a portion of the "apparatus" of claim 9 between reservoir 3 and reservoir 31. The reservoirs 3/31 "are included in a circuit which further comprises a storage container, a pump, and connection lines" of the "apparatus" (see spec., page 7, lines 6-15; and page 5, lines 30-34).

Accordingly, it is respectfully submitted that the "apparatus" of claim 9 is reflected, at least in part, in Fig. 3 of the drawings. It is further respectfully submitted that Fig. 3 has been revised in accordance with the requirements of 37 CFR 1.83(a) (i.e., a labeled rectangular box) and a replacement sheet (i.e., sheet 2 of 3) has been provided herewith.

It is respectfully noted that under 37 CFR 1.83(b) the drawings need only reflect so much of the "apparatus" sufficient "to show the connection of the invention therewith." Thus, based at least on the foregoing, reconsideration and withdrawal of the objection to the drawings and/or claim 9 are respectfully requested.

In addition, should any further revision to the drawings be required, instruction as to such revision is respectfully requested.

Regarding item (2) identified above, it is respectfully submitted that specification has been revised in accordance with the Examiner's suggestion. Accordingly, reconsideration and withdrawal of the objection to the specification are respectfully requested.

Regarding item (3) identified above, it is respectfully submitted that present claim 1 is patentable over the cited reference (i.e., the Berkland patent), and that claim 1 defines an invention that is neither disclosed nor suggested by the cited reference.

The Berkland patent reads on a hand printer having, as noted in the Action, a rectangular frame 10 connectable to an

ink supplying bottle 12 via a bottle adapter 11; a separator or weir 16 with ribs 16a/16b/16c and holes 16d; a compressible ink pervious rubber pad 18/21; and a covering 19/22 covering the pad 18/21. (see col. 2, lines 21-31 and 48-72; col. 3, lines 31-63).

However, notwithstanding the foregoing, it is respectfully submitted that the Berkland patent fails to disclose or suggest "said liquid is directly transported from said reservoir through said permeable carrier body and said permeable stamp body to said structured printing face during use". Rather, in clear contrast, the Berkland patent specifically teaches an arrangement requiring that the ink "pass from the bottle 12" through a plate 15. (see col. 2, lines 32-43). Further, the Berkland patent also teaches that a chamber is "defined between the complementary ink dispersing plates 15 and 16". (see col. 2, lines 65-66). Moreover, the Berkland patent clearly states that "ink from the squeeze bottle 12 passes downwardly through an opening in the supporting structure 10 and thence, through a center opening in the plate 15 whereupon it is admitted to a central portion of the weir plate 16". (emphasis added).

Thus, at least from the foregoing, it is respectfully submitted that the device of the Berkland patent clearly differs from the invention defined by present claim 1. Moreover, the Berkland patent notably teaches away from the invention of claim 1 by teaching/suggesting that ink from bottle 12 flow/pass, first through frame 10, then through plate 15, then through weir 16, then through pad 18/21, and finally through cover 19/21.

Accordingly, as the cited reference fails to disclose or suggest the invention defined by claim 1, reconsideration and withdrawal of the rejection, and allowance of claim 1, are

respectfully requested.

Claims 2 through 9, which depend either directly or indirectly from claim 1, are patentable at least for the reasons discussed above with respect to claim 1. Accordingly, reconsideration and withdrawal of the rejection based on the Berkland patent, and allowance of claims 2 through 9, are respectfully requested.

Regarding item (4) identified above, it is respectfully submitted patentable over the cited reference combination (i.e., the Berkland patent and the Roser patent), and that claims 5 and 6 define an invention that is neither disclosed nor suggested by the cited combination.

Regarding claim 5, the Action contends that "reservoir 12" of the Roser patent is comparable to the reservoir of claim 5, which claim depends from claim 1. It is respectfully submitted that this characterization of "reservoir 12" is inaccurate.

That is, "reservoir 12", as disclosed in the Roser patent, is not "a reservoir for a liquid at [a] second side [of a permeable stamp body]... wherein said liquid is directly transported from said reservoir through [a] permeable carrier body and said permeable stamp body to said structured printing face during use."

In contrast, "reservoir 12" of the Roser patent is, in essence, a pad similar to pad 18/21 of the Berkland patent that, "in use", must be "impregnated with ink" and is operative as "an ink applicator, for applying ink from [an] inking surface 28 of the [reservoir 12] to a surface to be inked." (col. 3, lines 66-

69). Thus, it is respectfully submitted that "reservoir 12" is not comparable to the reservoir of claim 5.

Still further, it is respectfully noted that the Roser patent also fails to disclose or suggest "liquid [being] directly transported from said reservoir through said permeable carrier body and said permeable stamp body to said structured printing face during use". Accordingly, based at least on the foregoing, reconsideration and withdrawal of the rejection, and allowance of claim 5, are respectfully requested.

Regarding claim 6, it is respectfully submitted that claim 6, which depends from claim 1, is patentable over the cited combination at least for the reasons discussed above with respect to claim 1. Accordingly, reconsideration and withdrawal of the rejection, and allowance of claim 6, are respectfully requested.

Regarding item (5) identified above, it is respectfully submitted patentable over the cited reference combination (i.e., the Berkland patent and the Whitesides patent), and that claims 7 to 9 define an invention that is neither disclosed nor suggested by the cited combination.


It is respectfully submitted that claims 7 to 9, which either directly or indirectly depend from claim 1, are patentable at least for the reasons stated above with respect to claim 1. Accordingly, reconsideration and withdrawal of the rejection, and allowance of claims 7 to 9, are respectfully requested.

In sum, it is respectfully submitted that (1) the present

pending claims are clearly patentable over each of the cited references and/or any proper combination thereof; and (2) the proposed present claims, have, in effect, only clarified what Applicant's consider to be their invention, and consequently, as a search is to cover all subject matter which can reasonably be anticipated, and as every claim includes within its breadth or scope one or more variant embodiments, (see MPEP 904.03 and 904.01(a)), the present claims clearly raise no new matter and/or new issue necessitating further consideration and/or search. Thus, this application is in condition for allowance. Accordingly, reconsideration and withdrawal of all rejections of the claims are respectfully requested.

Dated:

7/3/03



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION

Please amend the specification as follows:

Please replace the last paragraph of page 4 (i.e., page 4, lines 32-34) with the following:

The second object of the invention, i.e. to provide a method of manufacturing an electronic component of the kind mentioned in the second paragraph, is achieved in that the stamp ~~as claimed in any one of the claims 1 to 6 of the present invention~~ is used.

IN THE CLAIMS

Please amend claims 1 through 9 as follows:

1. (Amended) A stamp ~~(10, 20)~~ for use in a lithographic process, ~~which stamp (10, 20) comprises~~ said stamp comprising:

a permeable stamp body ~~(1)~~ with a first ~~(11)~~ side and a second side, said first and second sides being opposed, ~~opposed side (12), with;~~

a structured printing face ~~(2)~~ at the said first side (11) and;

a reservoir ~~(3)~~ for a liquid at the said second side (12), ~~which stamp body (1) is permeable to the liquid, characterized~~

~~in that; and~~

~~a permeable carrier body (4) is present between the connecting said permeable stamp body (1) and the said reservoir (3), which carrier body (4) is permeable to the liquid present in the reservoir (3), and~~

~~wherein said liquid is directly transported from the said reservoir (3) through said permeable carrier body and said permeable stamp body to the said structured printing face (2) during use.~~

2. (Twice amended) ~~A The stamp (10, 20) as claimed in of claim 1, characterized in that the wherein said permeable carrier body (4) has a first side (41) and a second, opposed side (42), with the said permeable stamp body (1) at the said first side (41) and the said reservoir (3) at the said second side (42), in that the said permeable carrier body (4) comprises having channels (5, 51), and in that at least a portion of the channels (5, 51) extends which extend from the said first side (41) to the said second side (42) of the said permeable carrier body (4).~~

3. (Amended) ~~A The stamp (10, 20) as claimed in of claim 2, characterized in that the wherein said first (11) side and the said second side (12) of the said permeable stamp body (1) lie at a distance (13) from one another, and the said channels (5, 51) at the said first side (41) of the said permeable carrier body (4) each have a diameter which is smaller than the said distance (13) between the said first (11) side and the said second side (12) of the said permeable stamp body (1).~~

4. (Amended) A The stamp (10, 20) as claimed in of claim 1, ~~characterized in that the~~ wherein said permeable carrier body (4) comprises has a porous material.

5. (Twice amended) A The stamp (10, 20) as claimed in of claim 1, ~~characterized in that the~~ wherein said reservoir (3) ~~comprises~~ has a porous material.

6. (Twice amended) A The stamp (10, 20) as claimed in of claim 1, ~~characterized in that the~~ wherein said stamp (20) is cylindrical in shape, with the said structured printing face (2) forming ~~the outermost~~ an outer cylinder shell.

7. (Twice amended) A method of manufacturing an electronic component, ~~which method comprises the~~ comprising the steps of:

patterning ~~of~~ a surface of a substrate by means of a stamp (10, 20), ~~which said stamp (10, 20) is provided with~~ having a structured printed face (2) for use in a lithographic process; and

bringing said ~~which~~ stamp (10, 20) is brought into contact with the said substrate such that a liquid ~~present as the~~ cooperative with said structured printing face (2) is transferred to the a surface of the said substrate, ~~characterized in that the~~

wherein said stamp (10, 20) ~~as claimed in of~~ claim 1 is used therein.

8. (Amended) A The method as claimed in of claim 7, characterized in that wherein

~~the~~ said stamp (20) is cylindrical in shape, and  
~~the~~ said stamp (20) is rotated when being applied to  
the substrate such that the entire printing face (2) of the  
stamp (20) is rolled over the substrate.

9. (Twice amended) An apparatus for providing at least one  
patterned layer on a substrate, which apparatus is provided with  
a stamp (10, 20) ~~as claimed in~~ of claim 1.